

Table CT6. Industrial Sector Energy Consumption Estimates, Selected Years, 1960-2016, Minnesota

Year	Coal	Natural Gas ^a	Petroleum						Hydro-electric Power ^{e,f}	Biomass		Geo-thermal ^f	Solar ^{f,i}	Retail Electricity Sales	Net Energy ^{f,j}	Electrical System Energy Losses ^k	Total ^{f,j}
			Distillate Fuel Oil	HGL ^b	Motor Gasoline ^c	Residual Fuel Oil	Other ^d	Total		Wood and Waste ^{f,g}	Losses and Co-products ^h						
	Thousand Short Tons	Billion Cubic Feet	Thousand Barrels						Million kWh	Million kWh							
1960	2,555	49	6,062	841	4,266	5,690	5,024	21,884	156	--	--	--	NA	3,095	--	--	--
1965	2,776	83	7,651	988	3,947	4,213	6,593	23,392	178	--	--	--	NA	4,677	--	--	--
1970	2,020	98	7,784	1,275	3,608	3,894	7,919	24,480	168	--	--	--	NA	8,506	--	--	--
1975	2,292	101	7,991	1,985	3,132	2,675	9,183	24,965	189	--	--	--	NA	11,280	--	--	--
1980	1,057	101	5,708	4,183	1,336	1,818	7,527	20,573	145	--	--	--	NA	15,525	--	--	--
1985	1,027	66	4,985	2,406	1,718	481	8,206	17,796	145	--	--	--	NA	17,934	--	--	--
1990	1,283	88	5,483	2,459	1,117	700	11,122	20,880	172	--	--	--	(s)	23,497	--	--	--
1995	1,401	106	6,031	4,392	1,192	536	12,012	24,163	224	--	--	--	(s)	26,577	--	--	--
1996	2,088	102	6,510	4,855	670	643	13,458	26,136	250	--	--	--	(s)	26,934	--	--	--
1997	1,490	107	6,404	3,485	1,846	519	13,373	25,628	227	--	--	--	(s)	27,713	--	--	--
1998	2,014	105	6,298	2,777	1,240	353	12,870	23,537	204	--	--	--	(s)	28,214	--	--	--
1999	1,954	104	5,291	2,989	1,026	394	13,927	23,627	272	--	--	--	(s)	27,764	--	--	--
2000	2,092	106	4,857	3,442	996	570	13,206	23,070	248	--	--	--	(s)	28,842	--	--	--
2001	1,254	92	5,154	3,359	1,465	698	13,410	24,087	186	--	--	--	(s)	20,767	--	--	--
2002	1,261	96	5,010	3,899	1,412	530	12,215	25,066	45	--	--	--	(s)	21,515	--	--	--
2003	1,268	95	5,616	3,926	1,360	610	13,303	24,815	93	--	--	--	(s)	21,916	--	--	--
2004	1,312	97	5,854	5,448	1,400	654	13,424	26,779	132	--	--	--	(s)	22,415	--	--	--
2005	1,300	95	5,741	5,156	1,299	1,092	14,824	28,112	130	--	--	--	(s)	22,266	--	--	--
2006	1,271	103	5,296	4,702	1,228	396	14,717	26,339	96	--	--	--	(s)	22,664	--	--	--
2007	1,354	114	5,150	4,618	1,476	789	14,566	26,599	96	--	--	--	(s)	23,041	--	--	--
2008	1,359	144	6,017	3,265	924	1,203	12,364	23,773	118	--	--	--	(s)	23,810	--	--	--
2009	1,167	128	5,417	4,306	987	336	11,333	22,380	134	--	--	--	(s)	19,637	--	--	--
2010	1,305	158	6,722	2,365	1,302	198	R 11,816	R 22,403	127	--	--	--	(s)	22,798	--	--	--
2011	1,295	158	6,776	2,059	1,321	251	R 11,778	R 22,185	117	--	--	--	(s)	23,619	--	--	--
2012	1,131	160	6,814	2,219	1,332	42	R 11,959	R 22,367	74	--	--	--	(s)	23,416	--	--	--
2013	1,270	161	7,080	3,569	1,444	15	R 12,003	R 24,111	90	--	--	--	(s)	22,734	--	--	--
2014	1,236	174	7,215	4,078	1,214	11	R 11,218	R 23,735	19	--	--	--	1	23,076	--	--	--
2015	957	157	6,140	2,712	R 1,194	10	R 11,869	R 21,926	115	--	--	--	2	21,453	--	--	--
2016	1,055	163	5,971	2,589	1,305	5	12,107	21,977	130	--	--	--	3	21,217	--	--	--
Trillion Btu																	
1960	55.2	51.0	35.3	3.5	22.4	35.8	31.9	128.9	1.7	7.4	NA	NA	NA	10.6	254.7	26.1	280.8
1965	60.8	82.6	44.6	4.1	20.7	26.5	41.7	137.6	1.9	9.3	NA	NA	NA	16.0	308.1	38.1	346.2
1970	42.1	97.8	45.3	4.8	19.0	24.5	50.1	143.7	1.8	11.8	NA	NA	NA	29.0	326.1	70.2	396.3
1975	50.8	100.8	46.5	7.2	16.5	16.8	57.8	144.8	2.0	15.9	NA	NA	NA	38.5	352.7	92.3	445.0
1980	18.1	101.2	33.3	15.2	7.0	11.4	47.3	114.2	1.5	31.3	NA	NA	NA	53.0	319.2	127.3	446.4
1985	21.3	66.6	29.0	8.5	9.0	3.0	52.9	102.5	1.5	36.7	0.0	NA	NA	61.2	289.8	140.1	429.9
1990	23.8	88.7	31.9	8.8	5.9	4.4	70.5	121.5	1.8	28.0	0.7	0.0	(s)	80.2	344.7	190.5	535.2
1995	26.7	107.6	35.1	15.7	6.2	3.4	76.2	136.6	2.3	35.6	3.2	0.0	(s)	90.7	402.6	194.6	597.2
1996	40.0	104.3	37.9	17.2	3.5	4.0	84.9	147.6	2.6	35.9	4.3	0.0	(s)	91.9	426.4	195.8	622.2
1997	28.1	109.3	37.3	12.4	9.6	3.3	84.4	147.0	2.3	36.1	6.9	0.0	(s)	94.6	424.2	197.7	621.9
1998	37.5	106.6	36.6	9.9	6.5	2.2	81.7	136.9	2.1	33.3	7.6	0.0	(s)	96.3	420.2	196.0	616.2
1999	36.4	106.2	30.8	10.6	5.3	2.5	88.5	137.7	2.8	33.0	11.7	0.0	(s)	94.7	422.4	202.3	624.8
2000	40.4	107.5	28.3	12.2	5.2	3.6	84.1	133.3	2.5	35.7	13.4	0.0	(s)	98.4	431.1	201.1	632.2
2001	24.4	93.5	30.0	11.9	7.6	4.4	84.5	138.5	1.9	39.1	15.4	0.0	(s)	70.9	383.7	145.2	528.8
2002	24.4	96.3	29.2	20.9	7.4	3.3	76.8	137.6	0.5	28.6	18.2	0.0	(s)	73.4	379.0	160.3	539.3
2003	24.0	95.5	32.7	14.0	7.1	3.8	83.7	141.3	0.9	23.1	21.5	0.0	(s)	74.8	381.2	182.6	563.8
2004	24.9	97.8	34.1	19.4	7.3	4.1	85.1	149.9	1.3	34.2	23.6	0.0	(s)	76.5	408.2	177.3	585.6
2005	24.7	96.2	33.4	18.3	6.8	6.9	94.0	159.3	1.3	35.1	24.4	0.0	(s)	76.0	416.9	160.8	577.6
2006	24.1	104.7	30.7	16.7	6.4	2.5	92.8	149.1	1.0	33.0	31.5	0.0	(s)	77.3	420.7	161.5	582.2
2007	25.8	115.8	29.8	16.3	7.6	5.0	91.8	150.4	0.9	33.6	33.5	0.0	(s)	78.6	438.6	168.1	606.7
2008	26.1	147.2	34.8	11.5	4.7	7.6	77.8	136.3	1.2	32.9	40.0	0.0	(s)	81.2	464.9	168.8	633.8
2009	22.4	132.2	31.3	14.9	5.0	2.1	71.2	124.6	1.3	32.1	52.3	0.0	(s)	67.0	431.9	136.3	568.2
2010	24.9	160.0	38.8	9.1	6.6	1.2	R 74.2	R 130.0	1.2	R 37.6	63.4	0.0	(s)	77.8	R 494.9	159.2	R 654.1
2011	24.7	159.4	39.1	7.9	6.7	1.6	R 73.7	R 129.0	1.1	R 35.9	62.6	0.0	(s)	80.6	R 493.4	161.9	R 655.3
2012	21.4	163.0	39.3	8.5	6.7	0.3	R 74.9	R 129.8	0.7	R 34.6	56.9	0.0	(s)	79.9	R 486.2	163.4	R 649.6
2013	24.1	164.4	40.8	13.7	7.3	0.1	R 75.1	R 137.1	0.9	R 34.5	55.3	0.0	(s)	77.6	R 493.7	152.2	R 645.9
2014	23.2	179.2	41.6	15.6	6.1	0.1	R 70.3	R 133.7	0.2	R 37.3	61.8	0.0	(s)	78.7	R 514.2	158.3	R 672.4
2015	17.5	163.4	35.4	10.4	6.0	0.1	R 74.3	R 126.3	1.1	R 33.7	61.0	0.0	(s)	73.2	R 476.2	138.2	R 614.3
2016	19.6	168.5	34.4	9.9	6.6	(s)	75.7	126.7	1.2	34.3	62.1	0.0	(s)	72.4	484.8	134.4	619.3

^a Natural gas as it is consumed; includes supplemental gaseous fuels that are commingled with natural gas.

^b Hydrocarbon gas liquids, include natural gas liquids and refinery olefins.

^c Beginning in 1993, includes fuel ethanol blended into motor gasoline. There is a discontinuity in this time series between 2014 and 2015 because of coverage. See Technical Notes, Section 4.

^d Includes asphalt and road oil, aviation gasoline, kerosene, lubricants, petroleum coke, and the "other petroleum products" category. See Technical Notes, Section 4.

^e Conventional hydroelectric power. For 1960 through 1989, includes pumped-storage hydroelectricity, which cannot be separately identified.

^f There is a discontinuity in this time series between 1988 and 1989 due to the expanded coverage of renewable energy sources beginning in 1989.

^g Wood, wood-derived fuels, and biomass waste. Prior to 2001, includes non-biomass waste.

^h Losses and co-products from the production of fuel ethanol.

ⁱ Solar thermal and photovoltaic energy. Excludes a small amount of solar thermal energy consumed as heat that is included in the residential sector.

^j For 1981 through 1992, includes fuel ethanol blended into motor gasoline that is not included in the motor gasoline

column. Beginning in 2009, includes a small amount of wind energy consumed by industrial utility-scale facilities. Beginning in 1980, adjusted for the double-counting of supplemental gaseous fuels, which are included in both natural gas and the other fossil fuels from which they are mostly derived, but should be counted only once in net energy and total.

^k Incurred in the generation, transmission, and distribution of electricity plus plant use and unaccounted for electrical system energy losses. Pre-1990 estimates are not comparable to those for later years. See Section 6 of Technical Notes for an explanation of changes in methodology.

kWh = Kilowatthours. -- = Not applicable. NA = Not available.

Where shown, R = Revised data and (s) = Physical unit value less than 0.5 or Btu value less than 0.05.

Notes: Totals may not equal sum of components due to independent rounding. • The industrial sector includes industrial combined-heat-and-power (CHP) and industrial electricity-only plants. • The continuity of these data series estimates may be affected by the changing data sources and estimation methodologies. See the Technical Notes for each type of energy.

Web Page: All data are available at <https://www.eia.gov/state/seds/seds-data-complete.php>.

Sources: Data sources, estimation procedures, and assumptions are described in the Technical Notes.